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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/657,234	09/07/2000	James Patrick Allen	ROC9-2000-0220-US1	1600

7590

07/05/2005

Joan Pennington
535 North Michigan Avenue
Unit 1804
Chicago, IL 60611

EXAMINER

ENGLAND, DAVID E

ART UNIT

PAPER NUMBER

2143

DATE MAILED: 07/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/657,234

Applicant(s)

ALLEN ET AL.

Examiner

David E. England

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6 and 8-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6 and 8-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1 – 4, 6, and 8 – 18 are presented for examination.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1 – 4, 6, and 8 – 18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

4. Claims 1 and 11 recite the limitation of “said SAN management application managing and configuring the storage area network via enabling in-band communications”. The specification does not disclose what an in-band would consist of. Applicant is asked to amend or give examples that can be found in the specification to describe this limitation.

5. All other dependent claims are rejected for their dependency to claims 1 and 11.

Claim Rejections - 35 USC § 103

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6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1 – 4, 6, 10 – 14 and 15 – 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Kelman (6671820) in view of Stai et al. (6401128) (hereinafter Stai) in further view of Haren (6557060).

8. Referencing claim 1, as closely interpreted by the Examiner, Kelman teaches a storage area network (SAN) management and configuration method via enabling in-band communications comprising the steps of:

9. utilizing a SAN management application for communicating with a host bus adapter (HBA) device driver, (e.g. col. 3, line 51 – col. 4, line 2), and

10. providing a pass through in said HBA device driver for passing communications to a designated device in the storage area network from said SAN management application including at least one topology analysis command, (e.g. col. 6, line 64 – col. 7, line 25, “*peripheral-type*”).

11. said SAN management application managing and configuring the storage area network via enabling in-band communications, (e.g. col. 3, line 51 – col. 4, line 2), but does not specifically teach providing said pass through includes providing at least a transport pass through and an extended link service (ELS) pass through; and

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12. said at least one topology analysis command including a command to get interconnect information and a command to get topology information.

13. Stai teaches providing said pass through includes providing at least a transport pass through and an extended link service (ELS) pass through, (e.g. col. 6, line 33 – col. 7, line 7).

14. Haren teaches said at least one topology analysis command including a command to get interconnect information and a command to get topology information, (e.g., col. 4, lines 1 – 28).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Stai and Haren with Kelman because the gathering of specific analysis information could aid in the proper diagnosis of errors in the system.

15. As per claim 2, as closely interpreted by the Examiner, Kelman teaches the step of utilizing said SAN management application for communicating with a HBA device driver includes the step of providing a management application agent coupled between an end user and a storage device, (e.g. col. 1, lines 35 – 45, “*transfer agent*”), but does not specifically teach the agent coupled between the management application and said HBA device driver. Haren teaches the agent coupled between the management application and said HBA device driver, (e.g. col. 4, lines 1 – 28, “...*agent (e.g. I/O controller)*...” & Figures 1 and 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Haren with Kelman because an agent could perform management functions concerning which storage units and transmission information are within the scope or not within the scope for each node.

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16. As per claim 3, as closely interpreted by the Examiner, Kelman does not specifically teach the step of utilizing said management application agent for providing predefined, fibre channel, protocol functions for communicating with said device in the storage area network. Haren teaches the step of utilizing said management application agent for providing predefined, fibre channel, protocol functions for communicating with said device in the storage area network, (e.g. col. 4, lines 1 – 28, “...*agent (e.g. I/O controller)*...”). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Haren with Kelman because of similar reasons as stated above.

17. As per claim 4, as closely interpreted by the Examiner, Kelman teaches as the step of providing predefined protocol functions for communicating with said device in the storage area network include the step of providing a transport protocol function, (e.g. col. 1, lines 36 – 45), but does not teach an extended link service (ELS) protocol function. Stai teaches an extended link service (ELS) protocol function, (e.g. col. 6, line 33 – col. 7, line 7). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Stai with the combine system of Kelman and Haren because it would be more efficient for a system to utilize ELS for responding to a payload translation during a public-to-private translation or private-to-public.

18. Referencing claim 6, as closely interpreted by the Examiner, Kelman teaches the step of providing said pass through in said host bus adapter (HBA) device driver through a host bus adapter (HBA) for passing communications to a device in the storage area network from said

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SAN management application includes the step of providing said pass through for passing a plurality of commands, (e.g. col. 7, lines 27 – 36, “*command*” & col. 8, lines 1 – 22, “*command*”).

19. Referencing claim 10, as closely interpreted by the Examiner, Kelman teaches the step of providing said pass through for passing at least one configuration command, (e.g. col. 7, lines 27 – 36, “*command*” & col. 8, lines 1 – 22, “*command*”).

20. Claims 11 – 14, 16 and 17 are rejected for similar reasons as stated above including claims 1, 6 and 10.

21. Claims 15 and 18 are rejected for similar reasons stated above.

22. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelman Stai and Haren as applied to claim 1 above, and in further view of Panas et al. (6473857) (hereinafter Panas).

23. As per claim 8, as closely interpreted by the Examiner, Kelman, Stai and Haren do not specifically teach the step of providing said pass through for passing at least one performance analysis command. Panas teaches the step of providing said pass through for passing at least one performance analysis command, (e.g. col. 4, lines 36 – 61). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Panas with the combine

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system of Kelman, Stai and Haren because it would be more efficient for a system to analyze the performance of a system in order to make sure that the system is running properly and when errors occur, they are easily identified and taken care of.

24. As per claim 9, as closely interpreted by the Examiner, Kelman, Stai and Haren do not specifically teach the step of providing said pass through for passing at least one attribute analysis command. Panas teaches the step of providing said pass through for passing at least one attribute analysis command, (e.g. col. 4, lines 36 – 61). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Panas with the combine system of Kelman, Stai and Haren because it would be more efficient for a system to analyze the attribute to see if there are trends in the system that could lead to a efficient running system or a system with errors in it.

Response to Arguments

25. Applicant's arguments with respect to claims 1 – 4, 6, and 8 – 18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. England whose telephone number is 571-272-3912.

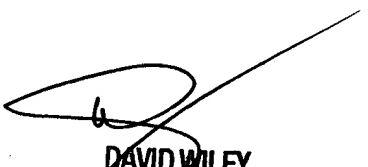
The examiner can normally be reached on Mon-Thur, 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David E. England
Examiner
Art Unit 2143

De



DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100